

REMARKS/ARGUMENTS

Entry of the foregoing amendment is respectfully requested in response to the Final Official Action of June 3, 2004, relating to the above-identified application for the purpose of placing the application in condition for allowance or, alternatively, in better condition for appeal.

Claims 1, 12 and 23 have been amended to specify that the amount of deviation of the infinite distance is individually set for each location in said first image. No new matter is presented. Basis is found at page 25, line 16 to page 26, line 7, of this application.

The rejection of Claims 1-23 under 35 U.S.C. § 102(b), as anticipated by US Patent 5,915,033 to *Tanigawa* is traversed and reconsideration is respectfully requested.

The present invention relates to an apparatus and method for stereo matching and the method of calculating an infinite distance corresponding point. As is known in the stereo processing art, there is obtained a pair of photographed images with the stereo camera system and generally the distance to an object is calculated as is explained in the application, beginning on page 1. The application explains about the calculation of parallax and points out that an important feature of the present invention is the presence of the address generator which sets a search range for a stereo matching and instructs to read out from the memory a part of the second image data which is within the search range and the first image data within the reference pixel region. Thus, the address generator corrects a location of the search range for the reference pixel region based on the amount of deviation of an infinite distance to a corresponding point with respect to a horizontal position of the reference pixel region. This is pointed out on the bottom of page 5 of the application.

It should be noted that a first object of the present invention is to provide an apparatus and method for stereo matching which can variably set a search range when performing stereo matching depending on the location on an image, as described on page 4, beginning at line 13, of this application.

Claims 1, 12 and 23 have been amended to make more clear the feature of this invention and basis is found in the application at pages 25, line 16 to page 26, line 7, where it is pointed out that the deviation amount is individually set for each location on the image.

Applicants point out that this feature of the present invention is not shown in the cited *Tanigawa* reference. The said reference discloses a bias "bs" (col. 4, lines 34-39) representing a shifting at a point at infinity used in detecting parallax. However, the subject matter as a whole which is defined by the claims in this application is not anticipated by the *Tanigawa* patent because the reference does not disclose obtaining a value of bias corresponding to the amount of deviation of the infinite distance corresponding point, more specifically, the correction value PS (shown in Figure 9) corresponding to the deviation amount.

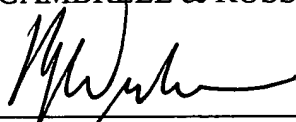
The Official Action attempts to correlate the elements of the present claims with the disclosure in the '033 patent of *Tanigawa*. However, the *Tanigawa* patent does not describe the invention as set forth in Claims 1-23 because it is lacking in the feature of the address generator correcting a location of the search range for the referenced pixel region based on the amount of deviation of an infinite distance corresponding point, where the amount of deviation is individually set for each location on the image.

Consequently, applicants respectfully submit that the Official Action fails to provide sufficient reasons for rejecting the claims in the present application.

Favorable action at the Examiner's earliest convenience is respectfully requested.

Respectfully submitted,

SMITH, GAMBRELL & RUSSELL, LLP

By: 
Robert G. Weilacher, Reg. No. 20,531

Suite 3100, Promenade II
1230 Peachtree Street, N.E.
Atlanta, Georgia 30309-3592
Telephone: (404) 815-3593
Facsimile: (404) 685-6893